Fundamental “Tools” for Economic Geography

What Is Theory?

- A way of looking at the world

- Theory separates description from explanation

- “Theory without experience is fantasy; experience without theory is blind” (Vincent Ostrom)

What determines where to put a firm?

Factors of Location

(Labor, Land, Capital, Managerial & Technical Skills)

- Labor
- The most important factor in location
- EXCEPT in the primary sector (extractive, farming)

- Relative contribution of labor varies by industry
- Labor may be mobile (less so with skilled workers)
- Availability
- Total population and birth rate
- Demographic structure by age and gender
- Immigration restrictions
- Local housing costs

Factors of Location, continued

Factors of Location, continued

- Land

- At the local level, availability and cost of **land** are the most important factor in siting decisions

- Accessibility (nearness to CBD) is a major factor in cost of land

Factors of Location, continued

- Capital

- Fixed capital: machinery, equipment, buildings

- A key reason for industrial inertia

- Must be purchased before business can open its doors

- Liquid capital “finance”: intangible revenues, corporate profits, savings, loans, stocks, bonds, etc.

- Most mobile factor of production
- Can be transferred instantaneously, with almost no cost
- Capital intensification: when capital substitutes for labor

Factors of Location, continued

- Managerial and Technical Skills
- Management
- Allocates resources, raises capital, monitors competition, gov't regulations, investments, personnel decisions, marketing, etc.

If you want to open a new factory…

Factors of Location, continued

- The Weberian Model (Alfred Weber, 1929)
- Emphasizes transportation costs in industrial location decisions
- Assumptions:
- Transportation costs are a linear function of distance
- What does this mean?
- Producers choose optimal locations (least cost, maximum profits)

- Implies that demand for a product is infinite at a given price
- Elements
- Raw materials and finished goods (products)
- Location (site of raw material, market)

Factors of Location, continued

- The Weberian Model, continued with raw materials

If you are a farmer…

The Von Thunen Model

- Diminishing Returns and Economic Rent
  - Economic rent: the difference in net profits between two units of land
    - Causes: variance in productivity or distance from market
- The Isolated State
  - Large city is the only market
  - Differential rents because of transport costs
    - Net profits of farmers closer to market are higher because of lower transport costs
    - Product price plus transport cost are important

The Von Thunen Model, continued

- Location-Rent Gradient

The Von Thunen Model, continued

- Location-Rent Gradients for Competing Crops

If you Plan to open a shop or restaurant…

USA at Night

- Smaller settlements occur more frequently and closer together, while larger settlements occur less frequently and farther apart; this creates a hierarchy of settlements of different size by frequency and distance between them.

- Small settlements provide goods and services that have small thresholds and ranges; large settlements provide goods and services that have large thresholds and ranges in addition to functionalities of small settlements.

Central Place Theory